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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention is excellent in a pet's mouth-cleaning power and ozostomia preventive effect, and relates to the pet food which carries out the prevention improvement of a pet's mouth trouble.

[0002]

[Description of the Prior Art]As a mouth-cleaning substrate for pets generally used now, dentifrices, HABURASHI, the brush of various shape, a rope, an irregular toy, pet food with the mouth-cleaning effect, etc. are studied and marketed. if cleaning using dentifrices and HABURASHI can fully be performed, although an effect is high, the time and effort which cannot be performed and an owner performs is taken, and a pet is also himself [pet] disagreeable -- fully cleaning was difficult for *** etc. The effect was insufficient although it could carry out by the pet itself being pleased with a brush, a rope, a toy, etc.

[0003]In that respect, the method of using pet food with the mouth-cleaning effect, a snack, etc. is a method which could carry out like the meal, and did not require the owner's time and effort, either, but was excellent.

[0004]Especially, since an animal hide origin substance is supple and tough collagen is included so much, the effect of rubbing a tooth physically and cleaning it is high, and also since a pet's palatability is high, it is a useful substrate in respect of a flavor. There is a proposal in JP,H5-192095,A using the oxhide origin substance into which the oxhide origin substance was processed in the shape of sponge as an example applied to pet food. However, in respect of the ozostomia preventive effect, it was insufficient.

[0005]The effect was insufficient although various vegetable essences, flavonoid, etc. were used as a ozostomia prevention ingredient.

[0006]Therefore, it excels in mouth-cleaning power, and it can be used easily, there is no product having the mouth-cleaning effect and a ozostomia preventive effect, and it waits for the development.

[0007]

[Problem(s) to be Solved by the Invention]This invention is excellent in a pet's mouth-cleaning power and ozostomia preventive effect, and makes it the SUBJECT to provide the pet food which carries out the prevention improvement of a pet's mouth trouble.

[0008]

[The means for solving a technical problem and an embodiment of the invention] In order to solve an aforementioned problem, as a result of inquiring wholeheartedly, when using a skin origin substance and cupric gluconate, this invention persons are excellent in mouth-cleaning power and a ozostomia preventive effect, find out that the pet food which carries out a prevention improvement can do a pet's mouth trouble, and came to make this invention.

[0009]Hereafter, it explains per this invention and also to details. Although the hide of various animal origin, such as a cow, a pig, a horse, a sheep, a rabbit, and a hen, can be used for the animal hide used for this invention, the hide of cow origin at points, such as the mouth-cleaning effect, the palatability of an animal, the ease of receiving, and the ease of processing it, is preferred.

[0010]Even if an animal hide remains as it is, it can be used, but it can also mash and use, and also can operate orthopedically after that in various shape, such as rod form, a globular form, a cube, a sheet, a flake, and the shape of a grain, and can perform natural seasoning, drying by warm air, etc., and can also

use them as the dry type pet food of various shape. A pharmaceutical form like tools which attached pet food at the tip of a stick or a handle is also contained.

[0011]As a ozostomia prevention ingredient, the most suitable cupric gluconate is used in respect of an effect, the palatability of an animal, safety, the ease of receiving, preservation stability, etc. Although an addition may be arbitrary, it is preferred to add 0.001 to 10% (it is [dried food mass percentage and the following] the same). An effect of less than 0.001% is insufficient, and when it exceeds 10%, there is a possibility that the palatability of an animal may worsen. When an animal hide is mashed, it may be made solution, and may add and mix, and a combination method of cupric gluconate may be applied to an animal hide as an ethanol solution, although various methods are used.

[0012]It is possible to also make an animal hide contain various foods and a flavor agent. When various **** mashes an animal hide, it may distribute as addition, mixing or a solid, and powder as solution, for example, and it may apply a method of making it contain to an animal hide as an ethanol solution, Polymer Division dispersion liquid, etc.

[0013]As foods and a flavor agent, cereals, such as corn and wheat, a sweet potato, Chaff and bran, such as starch, such as cornstarch, U.S. bran, and wheat bran, oligosaccharide, Oil and fat, such as sugars, such as isomerized sugar, beef tallow, fish oil, and soybean oil, an almond, a chestnut, Legumes, such as nuts and seeds, such as sesame, a soybean, and a pea, a tuna, a bonito, Fish and shellfishes, such as a horse mackerel, a sardine, a shrimp, an octopus, a scallop, and fish meal, a cow, a pig, a sheep, Eggs, such as meat, such as a hen, meat bonemell, and powdered blood, a hen's egg, and a quail egg, Milk, such as full fat milk, skim milk, whey, a cheese head, and fermented milk, a ginseng, a cabbage, Vegetable protein extracts, such as greenstuff, such as a Japanese pumpkin, soybean protein, and wheat protein, Mushrooms, such as fruits, such as a mandarin orange, an apple, and a banana, a mushroom, a hackberry, and shitake mushroom. Algae, such as laver, a Fucus vesiculosus, wakame seaweed, Spirulina, and chlorella, vitamin A, D, E, Vitamins, such as niacin and Kolin, calcium, Lynn, sodium, Processing of pet food, such as flavor agents, such as amino acid, such as minerals, such as iron, copper, cobalt, manganese, zinc, and iodine, methionine, lysine, and taurine, an extract of foods, a synthetic flavor, and a natural flavor, yeast, grass, cellulose, propylene glycol, and acids, cooking, There are raw material of others required for manufacture, etc.

[0014]In order to raise mouth-cleaning power of pet food of this invention, it is also possible to blend abrasive soap.

[0015]Although a kind in particular of abrasive soap is not limited, for example Sedimentation nature silica, silica gel, Silica system abrasive soap, such as aluminosilicate and JIRUKONO silicate, dibasic calcium phosphate and 2 hydrate, and an anhydride, Calcium pyrophosphate, calcium carbonate, aluminium hydroxide, alumina, magnesium carbonate, the 3rd magnesium phosphate, titanium oxide, zeolite, aluminum silicate, zirconium silicate, synthetic resin system abrasive soap, etc. are mentioned.

[0016]It is also possible to blend drugs in order to make a disease-of-oral-cavity improvement effect of pet food of this invention give.

[0017]As drugs made to contain in pet food, for example Sodium monofluorophosphate, Alkaline metal monofluoro phosphate, such as potassium mono-fluorophosphate, Fluorides, such as sodium fluoride and the first tin of fluoridation, tricosan, cetylpyridinium chloride, A benzalkonium chloride, benzethonium chloride, chlorhexidine hydrochloride, BIOZORU, allantoin, hinokitol, tranexamic acid, epsilon aminocaproic acid, Glycyrrhizin acids, beta-glycyrrhetic acid, taurine, glycerophosphate, Bisabolol, isopropylmethyl phenol, an azulene, sulfone sodium, Aluminum KURORU hydroxyallantoin, a dihydrocholestanol, ascorbic acid and its salt, an ascorbic acid derivative, acetic acid dl-***tocopherol, chlorophyll, sodium chloride, a water-soluble inorganic-phosphoric-acid compound, etc. are used.

[0018]A sweetening agent, coloring matter, an antiseptic, etc. can be blended with pet food of this invention if needed.

[0019]As a sweetening agent, sorbitol, xylitol, erythritol, maltitol, a RAKUCHI toll, Aspartame, saccharin sodium, stevioside, etc. are mentioned. Although various things are used as coloring matter and colorant, the red No. 2, the red No. 3, the red No. 226, the yellow No. 4, the yellow No. 5, the blue No. 1, the blue No. 2, the blue No. 201, the blue No. 204, the green No. 3, carotene, cull SAMIN, kaolin, mica, red ochre, a mica titan, etc. are used, for example. Sodium benzoate, methylparaben, butylparaben, etc. are used as an antiseptic.

[0020]

[Effect of the Invention] The pet food of this invention is excellent in mouth-cleaning power and a ozostomia preventive effect, and moreover does not take time and effort, but its palatability of a pet is high.

[0021]

[Example] Although working example and a comparative example are given and this invention is explained concretely hereafter, this invention is not limited to following working example.

[0022] [Working example 1 and comparative example 1] Mash oxhide and it extrudes from a pipe 2 cm in diameter. After cutting by a length of 10 cm, 10 mg of cupric gluconate was applied to the dry 10g/piece type cylindrical pet food air-dried and prepared as an ethanol solution, and the pet food (working example 1) which carried out natural seasoning, and the pet food (comparative example 1) which does not apply cupric gluconate were prepared. Based on the following standard, organic-functions evaluation of the ozostomia of the initial state of seven dogs was carried out, one pet food was given, and ozostomia evaluation after 5 minutes and use was carried out similarly. A use order of the kind of sample presupposed that it is free, and we decided to vacate for one day between samples. A result is shown in Table 1.

valuation-basis 3 point: — two which smell strongly point: — one which smells clearly point: — the 0 point: no odor which smells weakly [0023]

[Table 1]

		平均評価点	改善評価点 (使用前-使用後)
実施例 1	前	1.4	0.9
	後	0.6	
比較例 1	前	1.3	0.2
	後	1.1	

[0024] From the result of Table 1, it was admitted by feeding cupric gluconate with an animal hide origin substance that ozostomia could be prevented effectively. The effect of improving the quantity of a dental plaque and yellowish color of a gear tooth was also accepted.

[0025] [Working example 2] 1 kg of chicken skin was mashed, 10 ml of cupric gluconate solution was mixed 1% (cupric-gluconate concentration: 0.01%), and the cat was given. As a result of evaluating a ozostomia preventive effect, ozostomia depressor effect was high in the place which ate 100 g.

[Translation done.]